The Stepwise Care of Very Low Birth Weight Infants in Germany and Internationally

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Objective In Germany the care of newborn infants is regulated by directives of the Federal Joint Committee to ensure basic quality standards (Quality Assurance Directive for Preterm and Term Birth Infants (QFR-RL)). The assignment to different levels of care is based on maternal risk factors, maternal and fetal diseases, birth weight, and gestational age.

This article compares birth weight and gestational age limits used for the German directive with international regulations. It analyzes published reasons for internationally used assignment rules.

Methods A manual search of websites of medical societies and regulatory bodies in Europe, Northern America, and Australia for regulations and guidelines was performed. We describe levels of care, assignment rules based on birth weight and gestational age, and published evidence for these rules.

Results In Germany neonatal care is classified in four levels, with “Level 1” being the highest level. Outside of Germany, Level 1 is the lowest level of care. Internationally, 2 to 7 levels are used.

In Germany the birth weight and gestational age limit between the highest and the second highest level of care is 1,250 g and 29 + 0 weeks of gestation.

International, the assignment to the highest level of care is most frequently defined by a birth weight of 1,250 g or 1,500 g. Birth weight is often associated with gestational age, but sometimes the limit is defined only by gestational age. The gestational age limit of 29 + 0 weeks of gestation is not used outside of Germany.

In Switzerland, New York State (USA), and the state of Victoria (Australia), a birth weight limit of 1,250 g is used for the assignment between the highest and the next level of care. In all these cases, the gestational age associated with this limit is higher than in Germany (30, 31 or 32 weeks of gestation).

The American Academy of Pediatrics refers to a meta-analysis in which the mortality was significantly lower if preterm infants with less than 1,500 g and 32 + 0 weeks of gestation were born and treated in a highly specialized hospital. Further gestational age and birth weight limits are based solely on expert opinion.

Conclusion Birth weight and gestational age limits for the assignment of preterm infants to different levels of care are internationally inhomogeneous. Only one guideline provides a scientific justification for assignment rules.

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